### NATIONAL INSTITUTES OF HEALTH WARREN GRANT MAGNUSON CLINICAL CENTER NURSING DEPARTMENT

## Standard of Practice: Oral Care for the Research Patient

#### **ESSENTIAL INFORMATION**

- Stomatitis = inflammation of the mouth; caused by pathogenic organisms, mechanical trauma, irritants, sensitization to chemical substances, nutritional deficiencies, skin disorders and systemic infections
- Toothettes are ineffective for cleansing teeth and removing plaque
- Mouth rinses containing alcohol or hydrogen peroxide should generally be avoided

#### I. ASSESSMENT

- A. Obtain baseline oral assessment on every patient upon admission.
- B. If patient is wearing dentures, have the patient remove them to assess gum line
- C. If patient has mucositis / stomatitis, or is immunocompromised, perform oral assessment every shift for inpatients and at every encounter for outpatients.
- D. Calculate Beck's oral dysfunction score. See Appendix A
- E. Check lab work for ANC & platelet count
- F. Use Pain Inventory 0-10 [0 = no oral discomfort to 10 being worst oral discomfort experienced] as needed.
- G. Assess for appropriate type of toothbrush based on comfort issues, absolute neutrophil (ANC) count [WBC X % neutrophils] and/or platelet count as per Beck's scale.

#### II. INTERVENTIONS

- A. Provide nursing care and monitoring based on the oral dysfunction score, pain inventory score and laboratory values. See Appendix B
- B. For critically ill patients or for those who cannot perform self-care, use oral care products that attach to the suction tubing at the bedside.
- C. Suggest a dental/hygiene consult when special conditions might require specific oral care. A dental consult should be performed whenever possible for patient's who will receive immunosuppressive therapy.
- D. Refer to NIDCR website for patient education materials.

#### III. DOCUMENTATION

- A. Document the oral assessment, Beck's score and pain inventory score (if indicated) via the MIS screen with each assessment.
- B. Document each intervention and patient's tolerance of care.

#### IV. REFERENCES

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- M. Wilkes, J.D. 1998. Prevention and treatment of oral mucositis following cancer chemotherapy. Seminars in Oncology, 25, (5), 538 551.

Approved by:	
Clare E. Hastings, R.N., Ph.D. Chief Nursing & Patient Care Services	

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# Appendix A

# **Beck's Oral Assessment Guide**

# Rank each area 1, 2, 3, or 4

Area	1	2	3	4
Lips	Smooth, pink, moist, and intact	Slightly wrinkled and dry.     One or more isolated reddened areas	<ul><li>Dry and somewhat swollen.</li><li>1-2 isolated blisters</li></ul>	<ul><li> Very dry &amp; edematous.</li><li> Entire lip is inflamed. Blisters or ulceration present.</li></ul>
Gingiva Oral Mucosa	Smooth, pink, moist, and intact	Pale and slightly dry.     1-2 isolated lesions blisters, or reddened areas	<ul> <li>Dry and somewhat swollen generalized redness.</li> <li>More than 2 lesions, blisters or reddened areas.</li> </ul>	Very dry and edematous.     Entire mucosa very red and inflamed. Multiple confluent ulcers
Tongue	Smooth, pink, moist, and intact	<ul> <li>slightly dry</li> <li>1-2 isolated reddened areas</li> <li>Papillae prominent</li> <li>Mild white coat to tongue</li> </ul>	<ul> <li>Dry and somewhat swollen</li> <li>Generalized redness but tip and papillae are redder</li> <li>1-2 isolated lesions or blisters</li> </ul>	<ul> <li>Very dry &amp; edematous</li> <li>Thick and engorged</li> <li>Entire tongue very inflamed</li> <li>Tongue tip very red and demarcated with coating, multiple blisters and ulcers</li> </ul>
Teeth	• Clean & no debris • Free of plaque	<ul><li> Minimal debris.</li><li> Debris mostly between teeth</li><li> Visible plaque</li></ul>	<ul> <li>Moderate debris</li> <li>Debris clinging to or visible on enamel</li> <li>Visible cavities</li> <li>Heavy plaque</li> </ul>	Teeth covered with debris     Cavities eroding to the gum.
Saliva	Thin watery & plentiful	Decrease in the amount of saliva	Saliva scanty and may be somewhat thicker than normal May have trouble swallowing.	Saliva thick and ropy, viscid or mucid
Score each column				

Sum of all columns	
Total Score	

# Appendix B

Assessment	Interpretation of Dysfunction	Nursing Action
Parameters		
Beck Score ≤ 5	Little or No dysfunction	Routine Oral Care
Lab √		See Appendix C
Comfort Score 0–3		
Beck Score 6 - 10	Mild Dysfunction	Oral assessment q shift inpatient and q visit outpatient
Lab √		Use soft toothbrush
Comfort Score 4 - 5		Brush and rinse after each meal and bedtime
Beck Score 11 - 15	Moderate Dysfunction	Use an Ultra soft toothbrush
Lab √		Careful-monitoring of patients oral care technique
Comfort Score 5 - 6		Brush & Rinse after each meal and bedtime
		Recommend removing dentures
Beck Score 16 - 20	Severe Dysfunction	Provide Complete oral care q shift
Lab √		Use ultra soft toothbrush if comfort level allows,
Comfort Score 7 - 10		otherwise use saline soaked gauze to remove debris on teeth &
		tongue. Continue to floss provided ANC > 500 Platelet > 50 K
		and oral pain allows
		If patient unable to swish & spit, use pediatric Yankauer to suction
		mouth rinse.
		Remove dentures

## **Appendix C**

## **Routine Daily Oral Care American Dental Association Guidelines**

## **Brushing**

- Brush teeth twice daily; morning and evening
- Use a soft bristle brush that [a] fits mouth [b] can reach all teeth [c] replace q 3 4 months
- Use a fluoride containing toothpaste
- Brush at a 45 degree angle and in an elliptical motion (back and forth causes the gum-line to recede)
- Brush for 2 3 minutes (most of us brush for only 45 60 sec)
- Brush outer surfaces, then inner surfaces, then the chewing surfaces
- Brush the tongue, consider roof of mouth especially if prone to mouth odor

#### For Beck's score >5

- Brush teeth using appropriate tooth brush after every meal and at bedtime
- Ultra soft toothbrush for patients with any of the following:
  - Absolute neutrophil count (ANC) equal to or less than 500
  - Platelet count equal to or less than 50 K
  - Pain Inventory Score of more than 3
  - Evidence of oral irritation

## **Flossing**

- Floss daily
- It is important to assess the child's dexterity and skills prior to having the child initiate flossing
- Break off approximately 18" of floss, hold tightly between thumbs and forefingers
- Guide floss between teeth gently
- When floss reaches gum-line, curve it into a "C" shape and gently slide it into space between the gum & the tooth
- Hold floss firmly against tooth and rub floss up and down the side of the tooth
- Use pre-threaded floss holders for those individuals who have reduced dexterity, who are learning to floss, or are caregivers who are providing the flossing.
- Floss can be waxed, unwaxed, or flavored
- A water pick can be substituted for flossing for those individuals with braces and appliances

#### For Beck's >10

• Floss teeth daily unless the platelet count falls to 50 K or less or the ANC is equal to or less than 500 or pain level disallows

### Rinsing

- Rinse teeth & gums with plain water
- Rinsing teeth with plain water after meals or snacking can reduce teeth bacteria up to 30%!

#### For Beck's >5

- Rinse mouth after meals and before bedtime with saline solution. Mix 1/2-tsp. table salt to 8 oz of warm water
- If patient is unable to tolerate saline solution, an alcohol-free mouthwash solution may be substituted.
- Rinse and swish for 30 seconds, then spit

## **Denture Care**

- Dentures can be soaked in solution ordered from CHS as per manufacturer's recommendation
- If patient is at risk for oral irritation or infection, it is recommended that an adhesive paste not be used to hold dentures in place
- Dentures are should be checked for appropriate fit at least once a year; ill fitting denture can cause sores

## When brushing is not possible

• If patient condition does not allow for brushing then remove debris using a saline soaked gauze on teeth and tongue Use saline solutions for rinsing of mouth—evacuate rinsing solution using soft Yankauer (peds) suction Use Sage system for moisturizing lips and mouth

# **Supply sources**

## **CHS**

•	Cup, Denture	Lawson # 00877
•	Floss, Dental	Lawson #02288
•	Gum, Biotene For Dry Mouth	Lawson # 02659
•	Mouth Moisturizer, Sage	Lawson # 00180
•	Mouth Moisturizing, Gel	Lawson # 00675
•	Mouthwash, Alcohol-Free (Biotene	)Lawson # 00674
•	Threader, Dental Floss	Lawson # 02289
•	Toothbrush, Adult	Lawson # 00142
•	Toothbrush, Child	Lawson # 00141
•	Toothbrush, Soft	Lawson # 00678
•	Toothpaste, Crest 1.4 oz	Lawson # 00138
•	Toothpaste, Crest Child (Bubble Gu	ım)Lawson # 02438
•	Toothpaste, Dry Mouth (Biotene)	Lawson # 00676
•	Kit, oral suction – Yankauer tip Y c	onnector Lawson # 02570
•	Kit, suction brush - w/ oral brush t	ip moisturizer Lawson # 02572

## Nutrition

• Salt MIS-O-GRAM request to nutrition

# Pharmacy

Salivart (artificial saliva)